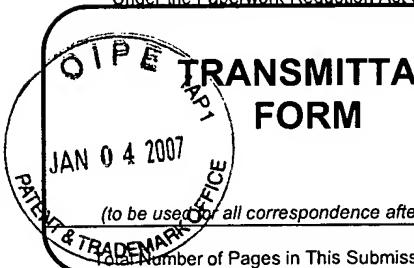


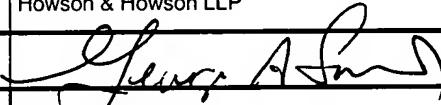
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| | | | |
|--|---|------------------------|------------|
|  TRANSMITTAL FORM JAN 04 2007 <small>(to be used for all correspondence after initial filing)</small> | | Application Number | 10/664,628 |
| | | Filing Date | 09/19/2003 |
| | | First Named Inventor | K. Inoue |
| | | Art Unit | 1771 |
| | | Examiner Name | A. Piziali |
| Total Number of Pages in This Submission | 5 | Attorney Docket Number | KIN90USA |

ENCLOSURES (Check all that apply)

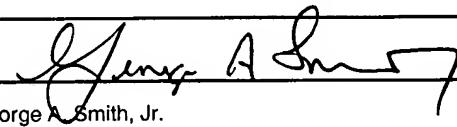
| | | |
|--|---|--|
| <input type="checkbox"/> Fee Transmittal Form | <input type="checkbox"/> Drawing(s) | <input type="checkbox"/> After Allowance Communication to TC |
| <input type="checkbox"/> Fee Attached | <input type="checkbox"/> Licensing-related Papers | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences |
| <input type="checkbox"/> Amendment/Reply | <input type="checkbox"/> Petition | <input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final | <input type="checkbox"/> Petition to Convert to a Provisional Application | <input type="checkbox"/> Proprietary Information |
| <input type="checkbox"/> Affidavits/declaration(s) | <input type="checkbox"/> Power of Attorney, Revocation | <input type="checkbox"/> Status Letter |
| <input type="checkbox"/> Extension of Time Request | <input type="checkbox"/> Change of Correspondence Address | <input type="checkbox"/> Other Enclosure(s) (please identify below): |
| <input type="checkbox"/> Express Abandonment Request | <input type="checkbox"/> Terminal Disclaimer | |
| <input type="checkbox"/> Information Disclosure Statement | <input type="checkbox"/> Request for Refund | |
| <input type="checkbox"/> Certified Copy of Priority Document(s) | <input type="checkbox"/> CD, Number of CD(s) _____ | |
| <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application | <input type="checkbox"/> Landscape Table on CD | |
| <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | | |
| <input type="checkbox"/> Remarks REPLY BRIEF IN RESPONSE TO THE EXAMINER'S ANSWER DATED NOVEMBER 3, 2006 | | |

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

| | | | |
|--------------|---|----------|--------|
| Firm Name | Howson & Howson LLP | | |
| Signature |  | | |
| Printed name | George A. Smith, Jr. | | |
| Date | 12/28/2006 | Reg. No. | 24,442 |

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

| | |
|-----------------------|---|
| Signature |  |
| Typed or printed name | George A. Smith, Jr. |
| | Date 12/28/2006 |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including the gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application No.: 10/664628
Applicant: K. Inoue
Filed: 09/19/2003
TC/A.U.: 1771
Examiner: A. Piziali
Docket No.: KIN90USA
Customer No. 00270

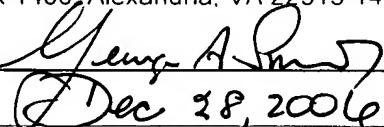
Confirmation No: 5070

REPLY BRIEF

MAIL STOP Appeal Brief - Patents
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING
UNDER 37 C.F.R. §1.8(a)(1)(ii)
(PATENT)

I certify that this paper is being deposited on the date shown below with the United States Postal Service, with sufficient postage, as first class mail and is addressed to "Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450."

Signed 
Date: 

Sir:

This reply brief is responsive to the Examiner's Answer dated November 3, 2006.

The Examiner has not demonstrated that Hagfors teaches that the average length of protruding parts of embedded fibers are, or should be, within the range of 0.01 and 3 mm.

After noting that the cited Hagfors patent says that "the fibers on the surface maintain a certain microscopic roughness on

Serial No. 10/664628
Filed 09/19/2003
Reply Brief dated December 28, 2006

it," (Hagfors, col. 1, lines 65-67), the Examiner gives an explanation of Ra, a measure of surface roughness used in Hagfors at column 4, line 27, and argues that the surface roughness in Hagfors is directly related to the heights of the protruding fibers.

The Examiner contends that, with a surface roughness Ra in the range from 0.001 to 0.03 mm, the average height of the protruding parts of the fibers would be in the range of 0.004 to 0.12 mm, which overlaps the applicant's claimed range. The applicant's claims refer not to height, but to "average length." The average height value can be translated to average length only by assuming a particular fiber angle distribution. For example, if a random distribution of fiber angles is assumed, the lengths of the exposed parts of the fibers would be in the range from $0.004/\sin 45^\circ$ (approximately 0.006 mm) to $0.12/\sin 45^\circ$ (approximately 0.17mm).

The range of 0.006 mm to 0.17 mm, of course, overlaps the applicant's range of 0.01 to 3.0 mm. However, as seen in Hagfors' FIG. 1, the angles of the fibers do not have a uniform distribution. They are not disposed at random angles with

Serial No. 10/664628
Filed 09/19/2003
Reply Brief dated December 28, 2006

respect to the surface of the belt, but are instead all shown nearly parallel to the surface of the belt. Some of the fibers 3 reach the surface of the belt and are exposed, and some of the fibers 3 are situated below the surface. Some of the fibers at the surface are exposed along their entire lengths. Others are exposed only along parts of their lengths. Of the fibers that are exposed, on the average, half the fiber length would be exposed at the surface. As Hagfors points out (at column 3, line 13) the fibers are typically 10 to 150 mm in length. In addition, as Hagfors points out, it is the polymer layer that is ground to expose the fibers (Hagfors, column 2, lines 47-49); Hagfors does not say that the fibers are shortened by grinding. Indeed, the fibers 3, parts of which are exposed at the surface, are depicted in lengths comparable to the lengths of the fibers underneath the surface. Finally, Hagfors gives an example of a range of 3.1 - 67 dtex (Hagfors, column 3, line 9), and points out that the fibers can be microfibers having a fineness less than 2 dtex¹ (Hagfors, column 3, line 11). It is entirely

¹Dtex (decitex) is a measure of fineness having the dimensions of mass/length. 1 dtex = 1 gram per 10,000 meters.

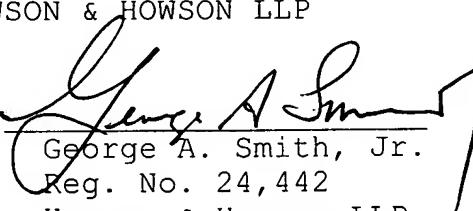
Serial No. 10/664628
Filed 09/19/2003
Reply Brief dated December 28, 2006

possible for a fiber, having a length of 10 mm or more and having a fineness within the ranges described by Hagfors, to be present at the surface of a resin-impregnated batt layer without causing the surface roughness Ra of the layer to exceed 30 μm (0.03 mm) or to fall below 1 μm (0.001 mm).

It follows that Hagfors' surface roughness range, 0.001 to 0.03 mm (which is a measure of height), is entirely consistent with a total fiber length of 10 mm as set forth in Hagfors at column 3, line 13. And, even if the average fiber length is as low as 10 mm, the exposed parts would have an average length of at least 5 mm, which is well outside the Applicant's claimed range of 0.01 to 3 mm.

Respectfully submitted,
HOWSON & HOWSON LLP

By


George A. Smith, Jr.
Reg. No. 24,442
Howson & Howson LLP
Suite 210
501 Office Center Drive
Fort Washington, PA 19034
Telephone: 215 540 9200
Facsimile: 215 540 5818